

AMENDMENT

In the Claims:

1. (currently amended) A method for improving the adhesion properties and switching performance of an electrophoretic display wherein display cells are filled with an electrophoretic fluid comprising a solvent, which method comprises (a) applying ~~a lamination~~ an adhesive composition to a component of said electrophoretic display, or (b) sealing the filled display cells with a sealing composition, wherein said ~~lamination~~ adhesive or sealing composition comprises

(i) a ~~high-dielectric~~ polymer or oligomer having a dielectric constant higher than that of the solvent,

(ii) a radically or photochemically graftable polymer, and

(iii) optionally a crosslinking agent, and

(iv) a catalyst which is optionally present when the crosslinking agent is present.

2. (currently amended) The method of Claim 1 wherein said polymer or oligomer of (i) has a dielectric constant in the range of about 3.5-17 measured at 18-27°C and at 60Hz.

3. (currently amended) The method of Claim 2 wherein said polymer or oligomer of (i) has a dielectric constant in the range of about 6-15 measured at 18-27°C and at 60Hz.

4. (currently amended) The method of Claim 1 wherein said polymer or oligomer of (i) is a polyurethane, polyurea, polycarbonate, polyamide, polyester, polycaprolactone, polyvinyl alcohol, polyether, polyvinyl acetate derivative, polyvinyl fluoride, polyvinylidene fluoride, polyvinyl butyral, polyvinylpyrrolidone, poly(2-ethyl-2-oxazoline), high-acid-number acrylic or methacrylic polymer or copolymer, gum Arabic, alginate, lecithin or polymer derived from an amino acid.

5. (currently amended) The method of Claim 4 wherein said polymer or oligomer of (i) comprises a functional group for chain extension or crosslinking.

6. (currently amended) The method of Claim 4 wherein said polymer or oligomer of (i) is selected from the group consisting of polyurethanes, polyureas, polycarbonates, polyesters and polyamides.

7. (currently amended) The method of Claim 6 wherein said polymer or oligomer of (i) comprises a functional group selected from the group consisting of -OH, -SH, -NCO, -NCS, -NHR, -NRCONHR, -NRCSNHR, vinyl, epoxide and derivatives thereof, wherein R is hydrogen, alkyl, aryl, alkylaryl or arylalkyl.

8. (currently amended) The method of Claim 7 wherein said polymer or oligomer of (i) is a functionalized polyurethane.

9. (original) The method of Claim 8 wherein said functionalized polyurethane is hydroxyl terminated polyester polyurethane or polyether polyurethane, isocyanate terminated polyester polyurethane or polyether polyurethane or acrylate terminated polyester polyurethane or polyether polyurethane.

10. (original) The method of Claim 9 wherein said functionalized polyurethane is a hydroxyl terminated polyester polyurethane.

11. (cancelled)

12. (withdrawn and currently amended) The method of Claim 1 wherein said radically or photochemically graftable polymer is a cellulose derivative or a polyvinyl alcohol derivative.

13. (withdrawn) The method of Claim 12 wherein said cellulose is cellulose acetate butyrate, cellulose acetate propionate, hydroxypropyl cellulose, hydroxybutyl cellulose, hydroxyethyl cellulose, methyl cellulose, carboxymethyl cellulose, or a copolymer thereof.

14. (withdrawn) The method of Claim 12 wherein said polyvinyl alcohol derivative is polyvinyl acetal, polyvinyl butyral, or a copolymer thereof.

15. (withdrawn and currently amended) The method of Claim 1 wherein said radically or photochemically graftable polymer is cellulose acetate, cellulose acetate butyrate, cellulose acetate propionate, polyvinyl acetal or a copolymer thereof.

16. (withdrawn and currently amended) The method of Claim 1 wherein said radically or photochemically graftable polymer is present in an amount of about 5% to about 30% by weight of the ~~high-dielectric~~ polymer or oligomer of (i) .

17. (withdrawn and currently amended) The method of Claim 16 wherein said radically or photochemically graftable polymer is present in an amount of about 10% to about 20% by weight of the ~~high dielectric~~ polymer or oligomer of (i) .

18. (currently amended) The method of Claim 1 wherein said ~~lamination~~ adhesive or sealing composition further ~~comprising~~ comprises a photoinitiator.

19. (currently amended) The method of Claim 18 wherein said photoinitiator is benzophenone, ~~ITX~~ (isopropyl thioxanthone), ~~BMS~~ (4(p-tolylthio)benzophenone), ~~Irgacure 651~~ (2,2-dimethoxy-1,2-diphenylethane), ~~907~~ (2-methyl-1-[4-(methylthio)phenyl]-2-morpholino-1-propanone), ~~369~~ (2-benzyl-2-(dimethylamino)-1-[4-(4-morpholinyl)phenyl]-1-butanone) or ~~184~~ (1-hydroxycyclohexylphenylketone).

20. (currently amended) The method of Claim 18 wherein said photoinitiator is present in an amount of about 0.5% to about 5% by weight based on the total weight of the ~~high dielectric~~ polymer or oligomer of (i) and the radically or photochemically graftable polymer.

21. (currently amended) The method of Claim 20 wherein said photoinitiator is present in an amount of about 1% to about 3% by weight based on the total weight of the ~~high dielectric~~ polymer or oligomer of (i) and the radically or photochemically graftable polymer.

22. (original) The method of Claim 1 wherein said crosslinking agent is a multifunctional isocyanate.

23. (original) The method of Claim 22 wherein said multifunctional isocyanate is an aliphatic polyisocyanate.

24. (cancelled)

25. (cancelled)

26. (currently amended) The method of Claim ~~25~~ 1 wherein said catalyst is selected from the group consisting of organotin catalysts, organozirconium catalysts and bismuth catalysts.

27. (original) The method of Claim 26 wherein said organotin catalyst is dibutyltin dilaurate.

28. (withdrawn) A composition for adhesion or sealing the display cells of an electrophoretic display comprising a high dielectric polymer or oligomer, a radically or photochemically graftable polymer and optionally a crosslinking agent.

29. (withdrawn) The composition of Claim 28 wherein said polymer or oligomer is a hydroxyl terminated polyester polyurethane, hydroxyl terminated polyether polyurethane, isocyanate terminated polyester polyurethane, isocyanate terminated polyether polyurethane, acrylate terminated polyester polyurethane, or acrylate terminated polyether polyurethane.

30. (withdrawn) The composition of Claim 28 wherein said polymer or oligomer is a hydroxyl terminated polyester polyurethane.

31. (withdrawn) The composition of Claim 30 wherein said hydroxyl terminated polyester polyurethanes is selected from the IROSTIC series.

32. (withdrawn) The composition of Claim 28 wherein said graftable polymer is a cellulose derivative or a polyvinyl alcohol derivative.

33. (withdrawn) The composition of Claim 32 wherein said cellulose is cellulose acetate butyrate cellulose acetate propionate, hydroxypropyl cellulose, hydroxybutyl cellulose, hydroxyethyl cellulose, methyl cellulose, carboxymethyl cellulose, or a copolymer thereof.

34. (withdrawn) The composition of Claim 32 wherein said polyvinyl alcohol derivative is polyvinyl acetal, polyvinyl butyral, or a copolymer thereof.

35. (withdrawn) The composition of Claim 28 wherein said graftable polymer is cellulose acetate, cellulose acetate butyrate, cellulose acetate propionate, polyvinyl acetal or a copolymer thereof.

36. (withdrawn) The composition of Claim 28 wherein said crosslinking agent is a multifunctional isocyanate.

37. (withdrawn) The composition of Claim 28 further comprising a catalyst when the crosslinking agent is present.

38. (withdrawn) The composition of Claim 37 wherein said catalyst is an organotin catalyst.

39. (original) The method of Claim 1 wherein said electrophoretic display is prepared using the microcup technology.

41. (withdrawn) An electrophoretic display comprising an electrode protecting layer which comprises a high dielectric polymer or oligomer, a graftable polymer and optionally a crosslinking agent.

42. (withdrawn) The electrophoretic display of Claim 41 which is prepared using the microcup technology.